

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) An electric generator/motor system, in particular for application in mobile units, motor vehicles, ships and the like as an on-board power system generator and starter, having:

a rotational field machine (~~DM~~) with three generator phase windings (~~a, b, c~~) and a pulse-controlled inverter which has a predetermined maximum power and is connected to the three generator phase windings (~~a, b, c~~) of the rotational field machine (~~DM~~), ~~characterized in that~~ wherein the pulse-controlled inverter is divided into a first and a second pulse-controlled inverter (~~PWR1, PWR2~~) which are identical to one another and which have half the maximum power, the first and second pulse-controlled inverters (~~PWR1, PWR2~~) each have three branch pairs (~~S1, S4; S2, S5; S3, S6~~), each of the three branch pairs (~~S1, S4; S2, S5; S3, S6~~) is connected to an associated winding of the three generator phase windings (~~a, b, c~~) and is composed of at least two symmetrically arranged electronic branch switches (~~S1 to S6~~) which are located in series with one another in the same direction, ~~the~~ and each branch pair (~~S1, S4; S2, S5; S3, S6~~) is connected to a d.c. voltage source via the branch switches; (~~S1 to S6~~), wherein the generator phase windings (~~a, b, c~~) are each connected between ~~a pole of the d.c. voltage source and the~~ respective center points of the associated branch pairs (~~S1, S4; S2, S5; S3, S6~~), of both pulse-controlled inverters; wherein in each case a filter capacitor (~~G1, G2~~) is connected in parallel with the branch pairs (~~S1, S4; S2, S5; S3, S6~~) of the first and second pulse-controlled inverters; (~~PWR1, PWR2~~), and wherein an electronic switch (~~S7~~) is ~~formed by a positive busbar which connects~~ connected in parallel with the generator phase windings between the first pulse-controlled inverter (~~PWR1~~) and the second pulse-controlled inverter (~~PWR2~~) ~~to a positive pole of the d.c. voltage source and via which~~ a positive busbars of the first pulse-controlled inverters (~~PWR1, PWR2~~) can be connected and disconnected from one another a positive busbar of the second pulse-controlled inverter and from a positive pole of the d.c. voltage source.

2. (Currently Amended) The electric generator/motor system as claimed in claim 1, ~~characterized in that~~ wherein the electronic switch (~~S7~~) is unidirectional.

3. (Currently Amended) The electric generator/motor system as claimed in claim 1, ~~characterized in that~~ wherein the electronic switch (~~S7~~) is a power MOS transistor with a parasitic reverse-biased diode.

4. (Currently Amended) The electric generator/motor system as claimed in claim 1, ~~characterized in that~~ wherein the electronic switch (~~S7~~) is a bidirectional switch.

5. (Currently Amended) The electric generator/motor system as claimed in claim 1, ~~characterized in that~~ wherein the branch switches (~~S1 to S6~~) are power MOS transistors with a parasitic reverse-biased diode.

6. (Currently Amended) The electric generator/motor system as claimed in claim 1, ~~characterized in that~~ wherein the rotational field machine (~~DM~~) has such an increased number of stator turns that when only one pulse-controlled inverter (~~PWR2~~) is connected into the circuit it is possible to bring about a flux linkage which corresponds to a flux linkage when the entire pulse-controlled inverter, i.e. including the first and second pulse-controlled inverters (~~PWR1, PWR2~~) are is connected into the circuit; without increasing the number of stator turns.

7. (Currently Amended) The electric generator/motor system as claimed in claim 1, ~~characterized in that furthermore~~ wherein a control unit is provided which under partial load implements a characteristic-diagram-dependent switchover point from a star circuit operating mode into a single phase circuit in a way which is optimized in terms of efficiency.

8. (Currently Amended) A method for operating a generator/motor system as claimed in claim 1, ~~characterized by~~ including the following steps:

~~operation of operating~~ the generator/motor system in a star circuit by keeping closed the branch switches (~~S1 to S3~~), arranged on the side of the positive pole of the d.c. voltage source, of the first pulse-controlled inverter (~~PWR1~~) and keeping open both the branch switches (~~S4 to S6~~) of the first pulse-controlled inverter which are arranged on the side of the negative pole of the d.c. voltage source and the

electronic switch, and actuating (S7) as well as all the branch switches of the second pulse-controlled inverter (PWR2) in a known manner to operate the generator/motor system;

sensing the rotational speed of the rotational field machine (DM) and determining a characteristic-diagram-dependent switchover point;

switching over the generator/motor system at the determined switchover point to operation in the single phase circuit ~~by means of the control unit~~ by closing the electronic switch S7 and actuating ~~the first~~ both pulse-controlled inverters in such a way that each generator phase winding (a, b, c) receives its own H bridge, ~~i.e. by closing~~ all the branch switches of the first and second pulse-controlled inverters (PWR1, PWR2) ~~being closed~~.

9. (Currently Amended) The method as claimed in claim 8, ~~characterized in that wherein~~ the switchover point is determined in a way which is optimized in terms of efficiency.

10 (New) An electric generator/motor system, in particular for application in mobile units, motor vehicles, ships and the like as an on-board power system generator and starter, having a rotational field machine with three generator phase windings and a pulse-controlled inverter which has a predetermined maximum power and is connected to the three generator phase windings of the rotational field machine; wherein:

the pulse-controlled inverter is divided into a first and a second pulse-controlled inverter which are identical to one another and which have half the maximum power;

the first and second pulse-controlled inverters each have three branch pairs;

each of the three branch pairs of each of the first and second pulse-controlled inverters is connected to an associated winding of the three generator phase windings and is composed of at least two symmetrically arranged electronic branch switches that are connected in series with one another in the same direction;

each branch pair is connected, via the branch switches, between positive and negative busbars connected to a d.c. voltage source;

the generator phase windings are each connected between the respective center points of the associated branch pairs in the first and second pulse-controlled inverters;

a respective filter capacitor is connected in parallel with the branch pairs of the first and second pulse-controlled inverters; and,

an electronic switch is connected in the positive busbar between portions of the positive busbar in the first pulse-controlled inverter and in the second pulse-controlled inverter so that the portion of the positive busbar in the first pulse-controlled inverter can be connected and disconnected from the portion of the positive busbar in the second pulse-controlled inverter and from the d.c. voltage source.